

## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

9060-228

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Signature



Typed or printed name Candi L. Riggs

Application Number

10/808,007

Filed

3/24/04

First Named Inventor

Esa Paatero

Art Unit

2838

Examiner

Rajnikant B. Patel

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

applicant/inventor.

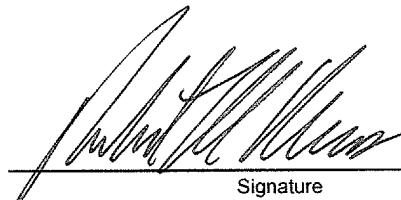
assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

attorney or agent of record.

40,723

Registration number \_\_\_\_\_



Signature

Robert M. Meeks

Typed or printed name

919/854-1400

Telephone number

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 \_\_\_\_\_

January 9, 2008

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.  
Submit multiple forms if more than one signature is required, see below\*.

\*Total of 1 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Esa Paatero  
Serial No.: 10/808,007  
Filed: March 24, 2004  
For: POWER CONVERSION APPARATUS WITH DC BUS PRECHARGE CIRCUITS  
AND METHODS OF OPERATING THEREOF

Date: January 9, 2008

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REASONS IN SUPPORT OF APPLICANT'S PRE-APPEAL  
BRIEF REQUEST FOR REVIEW**

Sir:

This document is submitted in support of the Pre-Appeal Brief Request for Review filed concurrently with a Notice of Appeal in compliance with 37 C.F.R. 41.31 and with the rules set out in the OG of July 12, 2005 for the Appeal Brief Conference Pilot Program. No fee or extension of time is believed due for this request other than those submitted with the petition for extension of time filed concurrently herewith. However, if any further fee or extension of time for this request is required, Applicant requests that this be considered a petition therefor. The Commissioner is hereby authorized to charge any additional fee, which may be required, or credit any refund, to our Deposit Account No. 50-0220.

**REMARKS**

Applicant hereby requests a Pre-Appeal Brief Review ("Request") of the rejections of the claims in the Office Action mailed October 11, 2007 ("Office Action").

Each of Claims 1-48 stands twice rejected. Claims 1-18 and 20-48 have remained unchanged over the course of office actions mailed September 8, 2006, January 12, 2007; June 1, 2007 and October 11, 2007. Claim 19 was amended to correct a typographical error in Applicant's Amendment filed December 7, 2006 in response to the Office Action mailed September 8, 2006. The current Office Action rejects Claims 1-39 as being allegedly unpatentable over a combination of U.S. Patent No. 6,819,576 to Johnson, Jr. ("Johnson '576") and U.S. Patent No. 6,483,730 to Johnson, Jr. ("Johnson '730"). Office Action, p. 2.

Independent Claim 1 recites:

A power conversion apparatus comprising:

a DC link comprising first and second DC busses and a reference bus;

a DC generator circuit coupled to the DC link and operative to generate first and second DC voltages with respect to the reference bus on respective ones of the first and second DC busses; and

a precharge circuit coupled to the DC link and operative to charge a first capacitance between the first DC bus and the reference bus and to transfer charge from the charged first capacitance to a second capacitance between the second DC bus and the reference bus.

Apparently referring to Claim 1, the Office Action alleges that Johnson '576 teaches "a precharge circuit (figure 3, item 330)," but concedes that Johnson '576 "does not disclose the utilization technique for a transferring charge from a first capacitor to a second capacitor . . ." Office Action, pp. 2 and 3. The Office Action asserts that Johnson '730 "teaches the utilization of the similar technique for a transferring charge from the first capacitor to second capacitor (column 4, line 15-21) . . ." and simply concludes that "[i]t would have been obvious one having ordinary skill in the art at the time of the invention." Office Action, p. 3.

As an initial matter, this rejection is clearly erroneous on its face, because the Office Action fails to indicate how Johnson '576 would be modified according to Johnson '730 to provide the recitations of the claims and, in fact, provides essentially no reasoning regarding a motivation to combine Johnson '576 and '730 in any manner. To establish a *prima facie* case of obviousness under 35 U.S.C. § 103, the prior art reference or references, when combined, must teach or suggest all the recitations of the claims, and there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. M.P.E.P. §2143. As stated in the "Examination Guidelines for Determining Obviousness Under 35 U.S.C. §103 in view of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*" (M.P.E.P. §2141), a question regarding whether a claimed invention is obvious under 35 U.S.C. § 103 must include an analysis of the factors set forth in *Graham v. John Deere Co.* (383 U.S. 1, 148 USPQ 459 (1966)), which are described by the Supreme Court in the *KSR* decision to be 1) determining the scope and content of the prior art; 2) ascertaining the differences between the claimed invention and the prior art; and 3) resolving the level of ordinary skill in the pertinent art (hereinafter, the "*John Deere* factors"). The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed

invention would have been obvious. M.P.E.P. § 2143. A patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR Int'l Co. v. Teleflex Inc.*, 550 U. S. 1, 15 (2007). A Court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions. *Id.* at 13. When it is necessary for a Court to look at interrelated teachings of multiple patents, the Court must determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. *Id.* at 14. The rejection fails to provide such reasoning in support of the combination of the references and, therefore, is clearly erroneous.

The Office Action also commits clear errors of fact in its interpretation of the references. The circuit 330 in FIG. 3 of Johnson '576 is a **battery converter circuit**, not a precharge circuit. See Johnson '576, column 5, lines 43-51. The cited passage from column 4 of Johnson '730 states:

First and second capacitors are rectifyingly coupled to the load to produce respective first and second DC voltages across respective ones of the first and second capacitors from an AC output voltage at the load. The first and second capacitors are selectively coupled to the load through respective third and fourth switches to transfer power between the first and second capacitors and the load.

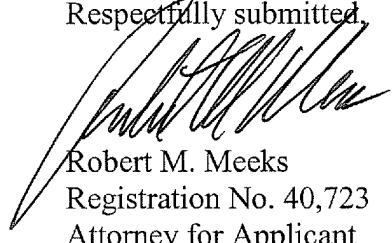
There is nothing in this passage teaching "the similar technique for a transferring charge from the first capacitor to second capacitor." In fact, this passage has nothing to do with operation of a precharge circuit and says nothing about charge transfers between the first and second capacitors. Accordingly, the Office Action's interpretation of the references is clearly factually erroneous.

The Office Action also commits clear legal and factual errors regarding the requirements for *prima facie* showing of obvious with respect to the other claims. For example, regarding independent Claim 19, the Office Action concedes that Johnson '576 does not disclose "a buck converter and boost converter topology," but alleges that Johnson '730 teaches "a buck converter and boost converter topology," vaguely referring to 3 columns of Johnson '730. Office Action, p. 3. This provides no basis for combining the references to produce the recitations of Claim 19. The Office Action also fails to provide any specific discussion of grounds for the rejections of the dependent claims.

In re: Esa Paatero  
Serial No.: 10/808,0071  
Filed: March 24, 2004  
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For at least the foregoing reasons, Applicant submits that the rejections in the Office Action are clearly erroneous and should be reversed by the appeal conference prior to the filing of an appeal brief.

Respectfully submitted,



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**CERTIFICATION OF TRANSMISSION**

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on January 9, 2008.



Candi L. Riggs